OMB No

REPORT FORCALENDAR YR 2002

U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

FORM MA331A

DUE DATE:

CURRENT INDUSTRIAL REPORTS

ANNUAL REPORT OF

IRON AND STEEL FOUNDRIES

If you have questions regarding this report form please contact: BRENDA CAMPBELL EXT6 1{800}201-4647

EMPLOYER IDENTIFICATION (EI) NUMBER. Identification number used on Employer's Quarterly Federal Tax Return (U.S. Treasury Department Form 941) (Enter if not shown, correct if wrong.)

223044511

CONTACT PERSON (Enter information if not shown, correct if wrong.)
Name ATTN: CONTROLLER

Area code 860 Number 445-3127

Fax number {860} 448-1856

The 8-digit number that appears above indicates that the Office of Management and Budget has approved this survey. If that number is not displayed, do not complete this form. YOUR RESPONSE IS REQUIRED BY LAW {Title 13, United States Code}. By section 9 of the same law, YOUR REPORT IS CONFIDENTIAL. It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this establishment's report. please refer to the 11 digit Identification Number (ID)

(Please correct any error in name and address including ZIP Code)

PART I FOR EACH ITEM LISTED BELOW, ENTER FIGURES OR "0" for current period. (The figures shown in the shaded areas were reported for the previous two periods.) PLEASE REFER TO THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT FORM.

for the previous two periods.	PLEAS	E KEFEK I	O THE INSTRUC	HONS BEFORE	COMPLETING	HIS KEPORT FO	KIVI.	
Item (Product code – Description)	ltem code	Report period	For Quantity	SHIPMENTS sale Value {\$1000}	For own use Quantity {Sh.tons}	or pure on whice perform fabrica	report im hased pro h your co hed no fur tion or s assembly}	ducts mpany ther igni-
DUCTILE IRON CASTINGS		·	1	2	3 .	4	5	6
3315111201-Ductile iron pressure pipe: under 14 inch	1022	2002		XXXXX	XXXXX			
{inside diameter}		2001		XXXXX	XXXXX		400 E	
		2000		XXXXX	XXXXX			
3315111107-Ductile iron pressure pipe: 14 to 24 inch	1023	2002		XXXXX	XXXX		oppopulation of the control of the c	Section (Section)
		2001		XXXXX	XXXXX			
		2000		XXXXX	XXXXX			
3315111108-Ductile iron pressure pipe: 25 inch and over	1025	2002		XXXXX				
Over		2001		XXXXX				100
		2000		XXXXX				

* Figures not received when form was prepared. PLEASE ENTER, if not previously submitted.

U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS Identification Number (ID) (Enter if not shown, correct if wrong)

Page

CURRENT INDUSTRIAL REPORTS - Continued

2 PART I - Continued SHIPMENTS {Do not report imported For or purchased products Item Item Report on which your company performed no further ----For sale---own use (Product code - Description) code period fabrication or signi-Quantity Value Quantity ficant assembly} {Sh.tons} **{\$1000}** {Sh.tons} 3315111111-Ductile iron fittings: under 14 inch 1026 2002 XXXXX {inside diameter} 2001 XXXXX 2000 XXXXX 3315111117-Ductile iron fittings: 14 to 24 inch 1027 2002 XXXXX 2001 XXXXX XXXXX 2000 3315111118-Ductile iron 1029 2002 XXXXX fittings: 25 inch and over 2001 XXXXX 2000 XXXXX 3315113206-Construction & utility castings {manholes. 1035 2002 XXXXX grates, hydrants, etc., excl. pipe & fittings} 2001 XXXXX 2000 XXXXX 3315113101-Automotive uses 1037 2002 XXXXX 2001 XXXXX 2000 XXXXX 3315113216-Machinery uses 1039 2002 XXXXX 2001 XXXXX 2000 XXXXX 3315113221-Other ductile iron castings, except 1041 2002 XXXXX pressure pipe & fittings & construction castings 2001 XXXXX 2000 X X X -TOTAL ductile iron 1095 2002 castings {sum of codes 1022-1041} 2001 2000 GRAY IRON CASTINGS 331511E200-Molds for heavy 1111 2002 XXXXX steel ingots 2001 XXXXX

XXXXX

2000

U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

Identification Number (ID) (Enter if not shown, correct if wrong)

Page

3

CURRENT INDUSTRIAL REPORTS - Continued

FORM CIR-2 (Continuation) (10-24-2002)

PART I - Continued {Do not report imported For or purchased products Item Item Report ----For sale---own use on which your company (Product code - Description) code period performed no further Quantity fabrication or signi-Value Quantity ficant assembly} {Sh.tons} **{\$1000}** {Sh.tons} 3315115121-Gray iron pressure pipe & fittings 1233 2002 XXXXX under 14 inch {inside diameter} 2001 XXXXX XXXXX 2000 3315115125-Gray iron 1253 2002 pressure pipe & fittings XXXXX14 inch & over {inside 2001 diameter} XXXXX **YXXXX** 2000 3315117114-Gray iron soil 1313 pipe 2002 XXXXX 2001 XXXXX 2000 XXXXX 3315117133-Gray iron soil 1315 2002 XXXXX pipe fittings 2001 XXXXX 2000 XXXXX 3315119206-Automotive uses 1415 2002 XXXXX 2001 XXXXX 2000 XXXXX 3315119111-Construction & utility castings {manholes, 1435 2002 XXXXX grates, hydrants, etc., excluding pipe & fittings} 2001 XXXXX 2000 XXXXX 3315119116-All other gray 1471 2002 XXXXX iron castings {incl. white} ex. pressure & soil pipe 2001 XXXXX & fittings & const. castings 2000 XXXXX X X X -TOTAL gray iron 1495 castings {sum of codes 2002 1111-1471} 2001 2000 331511A100-Malleable 2021 2002 XXXXX castings, standard 2001 XXXXX 2000 XXXXX 331511C300-Malleable 2002 2031 XXXXX castings, pearlitic 2001 XXXXX2000 XXXXX

U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

Identification Number (ID) (Enter if not shown, correct if wrong)

Page

CURRENT INDUSTRIAL REPORTS - Continued

PART I - Continued								4
Item (Product code – Description)	Item code	Report period	For	SHIPMENTS	For own use	or pur on whi perfor	report im chased pro ch your co med no fur	ducts mpany ther
			Quantity {Sh.tons}		Quantity {Sh.tons}	fabric ficant	ation or s assembly}	igni-
X X X -TOTAL malleable castings {sum of codes 2021	2095	2002	1	2	3	4	5	6
and 2031}		2001						
		2000	10000					
STEEL CASTINGS				**************************************	***************************************	***************************************	· ·	
{except investment}			1.4		Control of the Contro			
3315131102-Carbon steel								
railway specialties: side frames, bolsters, etc.	3010	2002		XXXXX			7	
{see manual}		2001		ххххх		April da su	1000	
3315131103-Other carbon		2000		XXXXX				
steel railway & transit rolling stock castings	3021	2002		XXXXX				
		2001		XXXXX	September 1		64 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
3315131215-Other carbon	2001	2000		XXXXX		N		
steel castings, include rolls for rolling mills	3031	2002		XXXXX				
		2001		XXXXX	100 miles			
3315135101-Alloy steel except high alloy - railway	3051	2002		XXXXX	***************************************	- Constitution of the Cons		
specialties		2001	100	XXXXX				
		2000	and the second	XXXXX				
3315135113-Other alloy steel castings except high alloy,	3061	2002		XXXXX		***************************************	Welling the second seco	
incl. rolls for rolling mills		2001		XXXXX				
3315133113-High alloy steel	<u> </u>	2000		XXXXX				
castings {see instruction manual	3071	2002		XXXXX		00//		
manuai		2001		XXXXX		16 3 3		file file
X X X -TOTAL steel castings {sum of codes 3010 thru 3071}		2000 -		XXXXX				
	3095	2002						
		2001	10 (40 (10 Table)) 1 (40 (10 Ta	1.33		8 13 3	1 4	
		2000						
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ltem (Product code – Description)			Deres		SHIPMENTSFor sale own use			***************************************				
		Item code	Report period						- Company of the Comp		•	
				Quantit {Pounds	y Value \$ \{\$1000		Quantity {Pounds}		***************************************			
3315120101-Steel investm castings: carbon, inclu	ding 4	4011	2002	1	2 XXXXX	x	3	. 4	5	5	6	
low alloy {report in lb	s.}		2001		XXXX	X						
·			2000		XXXXX	x .						
3315120106-Steel investmore castings: alloy, includ	ing 4	4051	2002		XXXXX	X			***************************************			
stainless {report in lb	s.}		2001		XXXXX							
			2000		XXXXX	x						
X X X -TOTAL steel invement castings {sum of c	odes 4	4095	2002			***************************************			***************************************			
4011 and 4051} {report lbs.}	in		2001									
			2000					1.00				
			•			-			and and a second			
						-						
								100 Sept. 1				
If all your items are not listed										-		
► PART II Has there been as ☐ Yes – Indica	-	_			ation of this Skip to Part I		ablishment d	uring this per	iod?			
	Nar	me of c	ompany		Address (N	lumbe	er and street, o	city, State, ZIP (Code)	Date	e of chan	ge
A. Purchased from										-		
					·	-					•	· · · ·
B. Sold to												
C. Plant discontinued all oper	rations		Date	•								-
D. Plant operations no longer	r covered	by this	s survey -	Describe in "I	Remarks" the	proc	ducts currently	produced.				
E. 🗌 Reorganized – Describe in								-				
► PART III Do the figures sh	own on	this re	eport and	-	_		e identical es for difference i		·?·			
PART IV Remarks							<u> </u>	- · · · · · · · · · · · · · · · · · · ·				
PART V CERTIFICATION -	- This re _l	port is s	substantia	lly accurate ar	nd has been i	prepa	ared in accorda	ance with instru	ictions.			·
Signature of authorized official			Title						Date			
Complete and return this fo envelope provided or to:	rm in the	•	1201 E	u of the Censulast Tenth Stressonville, IN 47	et	ı	IOTE: Please r	make a photoco	ppy of th	is for yo	our record	ds.

MA331A — IRON AND STEEL FOUNDRIES SHIPMENTS

DEFINITIONS AND SPECIAL INSTRUCTIONS

1. Scope of survey

This survey covers producers of ferrous castings. This includes producers of ferrous castings "for own use" as well as for commercial sale.

2. Figures to be reported

Companies with more than one establishment manufacturing the products covered by this survey are requested to complete a separate report form for each location. If you have not received a separate form for each of your establishments, please call the contact listed on the report form or write to the U.S. Census Bureau for additional forms.

a. Quantity and value of shipments

For the purpose of this report, the weight of castings reported should be the weight of the castings before machining. The removal of gates, users, or sprues, trumbling, dipping, and sandblasting does not constitute machining operations.

If you operate a machine shop at the same location as your foundry and the before-machining weight of castings is not available from book records, your best estimates are acceptable.

b. Shipments

Shipments for sale — Castings shipped to the trade.

Column (1) — Report the weight in short tons (2,000 pounds) of each type of casting shipped to the trade during the year, except investment castings which should be reported in pounds.

Column (2) — Report shipments in thousands of dollars for only item codes 1095, 1495, 2095, 3095, and 4095. These codes are for the total of each metal group and are for shipment to the trade during the year.

Column (3), shipments for own use — Report the weight in short tons (2,000 pounds), except investment castings which should be reported in pounds. Each type of casting shipped during the year for use by your company, or an affiliate, subsidiary, or parent company should be reported. Also includes castings produced and consumed at the same location in the production of finished products. The weight of castings produced in your foundry may be used as the basis for an estimate.

Include shipments to other manufacturers but exclude shipments received by you and reshipped without further processing.

3. Definitions

Compacted graphite is characterized by interconnecting graphite intermediate in shape between the flake graphite of gray iron and the spheroidal graphite of ductile iron.

All other gray iron castings — Include abrasives, rolls, chilled iron railroad car wheels, grinding balls, semisteel castings, and pressure and soil pipe fittings that require machining, threading, or assembling.

Cast iron pressure pipe and fittings — Report your tonnage of pipe according to the specified sizes of the inside diameter of the pipe. In allocating fittings to the three size groupings, the largest diameter of the fitting should be used. Include only those fittings that do not require any machining, threading, or assembling.

Pearlitic malleable — Report tonnage of pearlitic malleable castings pursuant to A.S.T.M. (American Society for Testing Materials) Designation, A 220–76.

Alloy steel — Alloy steel is steel which contains alloying elements in excess of the maximum standard ranges of the American Iron and Steel Institute as follows:

Manganese	in excess of 1.65%
Silicon	in excess of .60%
Copper	in excess of .40%
Chromium	in excess of .30%

Aluminum, cobalt, niobium, molybdenum nickel, titanium, tungsten, vanadium, zirconium, or any other alloying element

Any amount added to obtain a desired alloying effect

High alloy steel castings — High alloy steel castings means heat and/or corrosion-resistant steel castings containing 8 percent or more of chromium or nickel or both with or without molybdenum or other elements.

Railway specialties — Railway specialties and related items. Report as follows:

Type of casting	Code numbers			
Type of casting	Carbon steel	Alloy steel		
Side frames. bolsters, couplers, yokes, draft gear, snubbers (self-contained unit type), hopper doors and frames, and brake beams	3010	3051		
Other railway and transit rolling stock castings	3021	3071		

REFERENCE LIST

FORM MA331A		REFERENCE LIST
		IRON AND STEEL FOUNDRIES SHIPMENTS
Product code	Item code	Item description
		DUCTILE IRON CASTINGS (Report quantity in short tons)
3315111201 3315111107 3315111108	1022 1023 1025	Ductile iron pressure pipe ¹ Under 14" (inside diameter) 14" to 24" 25" and over
3315111111 3315111117 3315111118	1026 1027 1029	Ductile iron fitting ² Under 14" (inside diameter) 14" to 24" 25" and over
3315113206	1035	Construction and utility castings (manholes, grates, hydrants, etc., excluding pipe and fittings)
3315113101	1037	Automotive uses
3315113216	1039	Machinery uses
3315113221	1041	Other ductile iron castings, except pressure pipe and fittings and construction castings
xxx	1095	TOTAL
		GRAY IRON CASTINGS (Report quantity in short tons)
331511E200	1111	Molds for heavy ingots
3315115121 3315115125	1233 1253	Gray iron pressure pipe and fittings ^{1 2} Under 14" (inside diameter) 14" and over (inside diameter)
3315117114	1313	Gray iron soil pipe
3315117133	1315	Gray iron soil pipe fittings ²
3315119206	1415	Automotive uses
3315119111	1435	Construction and utility castings (manholes, grates, hydrants, etc., excluding pipe and fittings)
3315119116	1471	All other gray iron castings (including white iron) except pressure and soil pipe and fittings, and construction castings
xxx	1495	TOTAL
		MALLEABLE CASTINGS (Report quantity in short tons)
331511A100	2021	Standard
331511C300	2031	Pearlitic 1
xxx	2095	TOTAL

¹ See instructions in Definitions and Special Instructions section.
² Include as fittings only those that do not require machining, threading, or assembling.

REFERENCE LIST — Continued

FORM MA331A		
Product code	Item code	Item description
		STEEL CASTINGS (Except Investment) (Report in short tons)
		Carbon Steel railway specialities ¹
3315131102	3010	Side frames, bolsters, couplers, yokes, draft gear, snubbers (self-contained unit type), hopper doors and frames, and brake beams
3315131103	3021	Other carbon railway and transit rolling stock castings
3315131215	3031	Other carbon steel castings, including rolls for rolling mills
		Alloy steel except high alloy 1
3315135101	3051	Railway specialties
3315135113	3061	Other alloy steel castings, including rolls for rolling mills
3315133113	3071	High alloy steel castings ¹
XXX	3095	TOTAL
		STEEL INVESTMENT CASTINGS (Report in pounds)
3315120101	4011	Carbon, including low alloy
3315120106	4051	Alloy, including stainless
XXX	4095	TOTAL

¹ See instructions in Definitions and Special Instructions section.

² Include as fittings only those that do not require machining, threading, or assembling. 12/23/02